

# Clean Energy Communities Low-to-Moderate Income Program Summary Review Fiscal Years 2015 - 2018

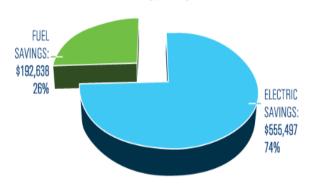
The Clean Energy Communities Low-to-Moderate Income Program (LMI) supports local governments and not-for-profit organizations by funding energy efficiency projects specifically designed to serve low to moderate income Marylanders. Established in 2010, the LMI grant program encourages innovative ideas directed at helping communities, neighborhoods, or entire buildings. LMI projects are geographically located in all regions of the state. LMI is a competitive program and applications for proposed energy efficiency upgrades are submitted by nonprofit organizations and local governments that work directly with residents in need. For more information LMI, please visit us online here.



B'nai B'rith Homecrest House used their \$190,000 LMI grant to upgrade the air conditioner / chiller which ensures senior residents will be healthy despite high heat and humid weather, and minimize chiller breakage issues which will prevent resident hospitalizations. The overall energy savings represents a 20% reduction in the baseline energy consumption for this property and an annual savings of \$24,000. The money saved with this energy efficient upgrade will be used to expand services like improving the onsite fitness center, library, beauty salon, gardens or resident transportation to local shops. Read more here.

# 2015 LMI PROGRAM OUTCOMES

Where did the energy savings come from?



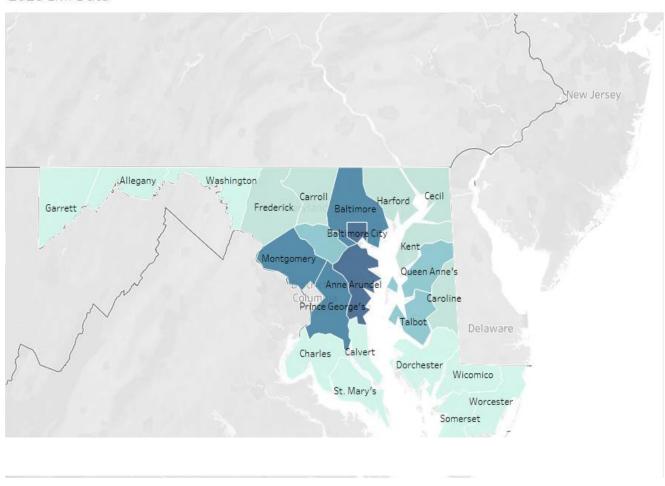
### **TOTAL ENERGY SAVINGS 32,795 MMBTU**

FUEL TYPE	MMBTU SAVINGS	% SAVINGS
ELECTRIC	13,795	42%
NATURAL GAS	19,159	58%
PROPANE	21	0.1%
TOTAL ENERGY SAVINGS	32,945	100%

ESTIMATED COSTS, SAVINGS, AND PAYBACK	
ESTIMATED ANNUAL ENERGY COST SAVINGS	\$748,135
ESTIMATED INSTALLED COST	\$8,829,593
ESTIMATED PAYBACK	11.8 YEARS
PAYBACK WITHOUT ADMINISTRATIVE & HEALTH/SAFETY COSTS	10.5 YEARS

ANNUAL GREENHOUSE GASES REDUCTION	١
GREENHOUSE GAS	METRIC TONS
CARBON DIOXIDE (CO <sub>2</sub> )	3448.8131
NITROUS OXIDE (N <sub>2</sub> O)	0.0708
METHANE (CH <sub>4</sub> )	0.2258
SULPHER OXIDE (SO <sub>x</sub> )	23.0241
NITROGEN OXIDE (NO <sub>x</sub> )	5.0693

### 2015 LMI Data





## **2015 Case Studies**

Arundel Community Development Services, Inc. (ACDS) – This non-profit utilized their 2015 LMI grant to support energy efficiency retrofits in 142 units at the Harbor House Apartments. As a result of the installed measures at Harbour House, each residence is estimated to save an average of \$600 annually. Over their useful life, the installed energy measures will improve the living environments of an estimated 2,576 Marylanders. Read more here.

Civic Works - Working to strengthen Baltimore County's neighborhoods, this non-profit leveraged funding from their 2015 LMI grant to reach residents not served by other government and utility energy efficiency programs. This focused effort on filling service gaps has resulted in improved home energy efficiency for 303 low- and moderate-income families in the Baltimore region. Additionally, these families have also enjoyed health, safety, and financial resilience benefits via these energy upgrades. Read more here.

Green & Healthy Homes Initiative (GHHI) - Formerly known as the Coalition to End Childhood Lead Poisoning, GHHI has been helping the city's residents get help for sick children in unhealthy physical environments since 2008. GHHI was able to help Baltimore households, with a \$215,000 LMI grant that supports GHHI's comprehensive strategy to improve health, economic and social outcomes along with home energy efficiency. Read more here.

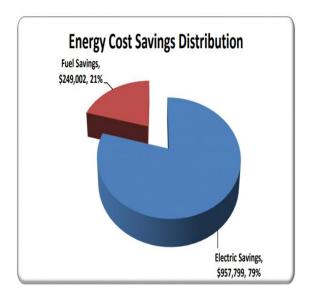
Before and After: Adding attic insulation greatly improved both the energy efficiency of the apartments and the comfort level of residents assisted from the ACDS project in 2015.

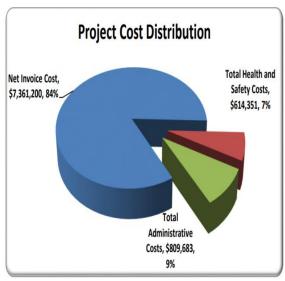




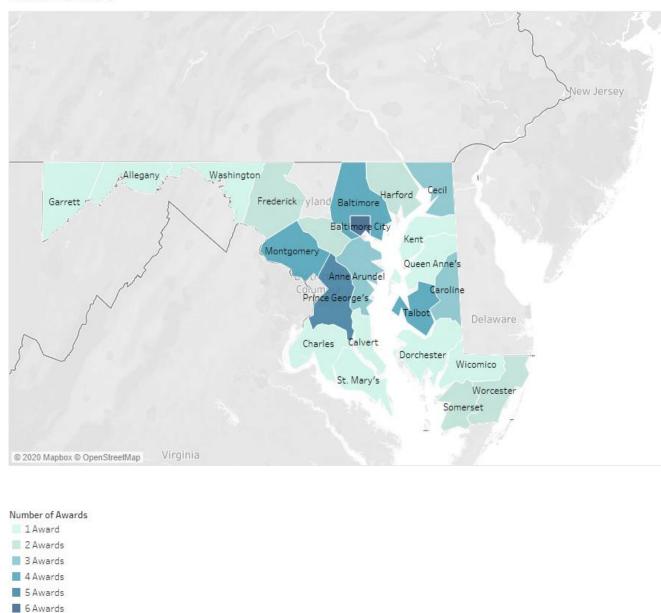
# **2016 Program Outcomes**

Please note technical review parameters were changed in 2016 as the program was expanded to more equally distribute funding across the state.

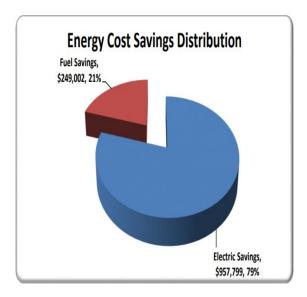


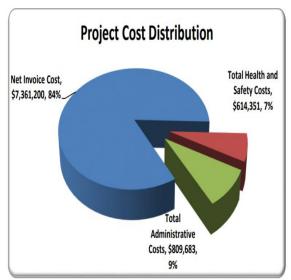


### 2016 LMI Data

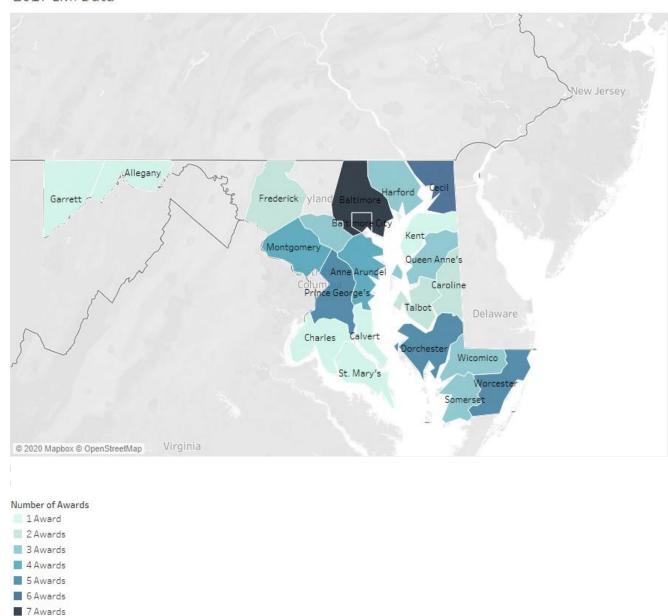


# **2017 Program Outcomes**





### 2017 LMI Data



### **2017 Case Studies**

Center for Urban Families – A commercial building located in Baltimore City with a mission to "strengthen urban communities by helping fathers and families achieve stability and economic success" used their 2017 LMI grant to tune up their HVAC controls and upgrade their air sealing, insulation, and lighting retrofit measures. Their anticipated energy savings is \$36,941 or 293,526 kWh for this nine-year old building. Read more here.

Talbot Interfaith Shelter – Easton's only year-round family shelter utilized their 2017 LMI grant to address air sealing and insulation issues as well as an HVAC tune-up, and lighting upgrades to improve comfort and reduce extremely high energy bills in 1890's era home. The estimated annual energy savings is over \$3,000. Read more here.

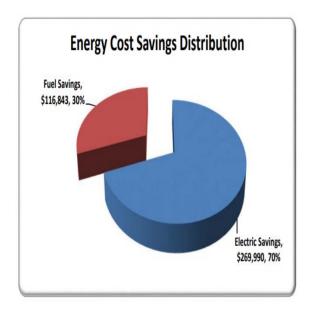
Northwest Townhomes – Unable to access funding from other programs, our LMI grant provided funding for much needed cost-effective energy efficiency upgrades in 68 townhomes. These energy upgrades will improve resident health and safety, enable future energy efficiency upgrades, and generate an average annual household energy cost savings of \$536. Read more here.

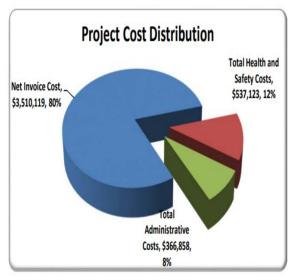
The Preserve at Red Run – To encourage new construction to install more energy efficient measures our LMI grant allows for incremental cost upgrades. Funds from the LMI grant allowed Red Run to use LED lights in all dwelling units and common areas, install ENERGY STAR® refrigerators and HVAC equipment throughout the project, maximize the insulation and air sealing, use WaterSense® faucets and showers, and upgrade to high efficiency windows. These incremental upgrades will pay for themselves in energy savings in just over two years. Read more here.



Working in concert with MEA, the non-profit Civic Works performed **269** energy audits and upgrade 714 homes with their 2017 LMI grant program funds in Baltimore City. Upgrades like weatherization, HVAC, and lighting. Civic Works also runs the green career training programs, including tracks in weatherization and solar installation. Workers learn hands-on skills and gain certifications needed to succeed in the green economy. Read more here.

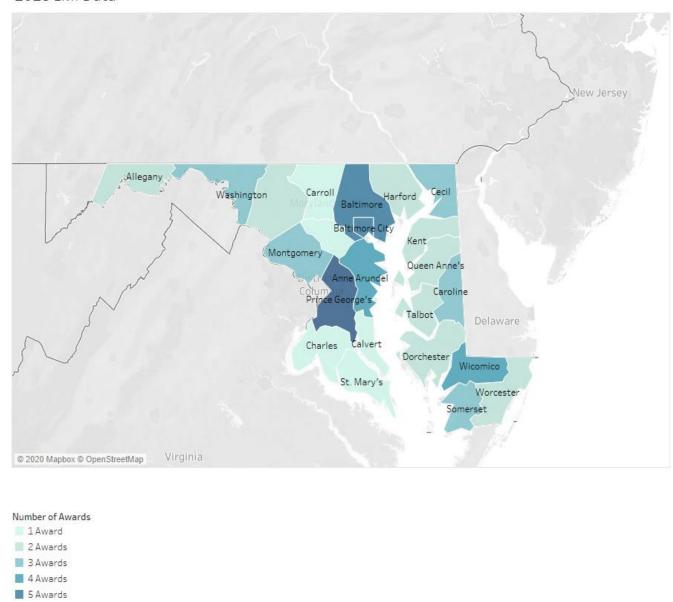
# **2018 Program Outcomes**





### 2018 LMI Data

6 Awards



### **2018 Case Studies**

Unity Properties - A subsidiary to Bon Secours, Unity Properties is dedicated to providing safe and affordable housing to the residents of West Baltimore. Having received three consecutive funding awards from the LMI grant, they were able to renovate 90 apartments in 45 row houses serving low-to-moderate income seniors, families, and people with disabilities. MEA funds enhanced other leveraged funds by providing energy audits, weatherization and air sealing, and upgrades to HVAC, appliances, and lighting, creating a safer, more comfortable, and more affordable housing for its residents. Read more here.

Wicomico County Housing Authority - Used their 2018 LMI funding to restore 15 single family homes from the brink of condemnation and turn them into comfortable, safe, and energy efficient homes. MEA funding was used for weatherization and air sealing, insulation, energy efficient upgrades, and various health and safety measures to create a healthier, safer living environment with lower monthly utility bills for these low income families. Read more here.

SAFE Housing, Inc. - Worked with contractors and MEA to correct issues in several Western Maryland communities that created an environment that disqualified home from energy efficiency upgrades. Funds were used for the completion of energy audits, followed by weatherizing measures and upgrades to HVAC, appliances and lighting among other eligible measures. Many low and moderate-income homes do not qualify for energy efficiency programs due to health and safety or structure issues. strengths of the MEA LMI program is that it allows and encourages projects that fall out of the scope for these programs. Read more here.

Unity Partners 2018 project examples of energy measures upgraded include (from left) CAZ testing and duct sealing for furnace, new ENERGY STAR® appliance upgrades, wall mount LED porchlights, and mechanical ventilation fans and humidity control switches in restroom.



# **National Recognition**

The American Council for an Energy-Efficient Economy (ACEEE) has issued their Fourth National Review of Exemplary Energy Efficiency Programs, which profiles model energy efficiency programs across the country. Programs were selected based on their innovation and effectiveness in helping customers increase energy efficiency in their homes and businesses. Maryland has received the Social Equity Award. The majority of LMI grant funded projects consist of whole-building upgrades where a Building Performance Institute (BPI) audit qualifies energy efficiency measures that result in an estimated simple payback of 10 years or less. For buildings on a commercial meter, the audit needs to qualify for energy efficiency measures that have an estimated simple payback of 15 years or less.

LMI creates local jobs, serves the entire state of Maryland, leverages additional funding sources, and has helped to grow the network of nonprofit and local government providers of assistance to the LMI populace. Equally important, the LMI program generates cost-effective energy savings and fosters healthier and safer living spaces. The program accomplishes these outcomes in a highly scalable format in which MEA staff actively direct and implement the program. By weighing savings and allowing any form of energy savings, LMI can implement many measures that would not be eligible for other programs.

Energy reductions exceeding 20 percent can be achieved cost effectively in many buildings. The MEA LMI program has realized cost-effective savings from additional measures that other programs do not permit. Serving multiple types of buildings (existing residential, new residential, and commercial buildings) expands the range of possible project types and increases energy savings. To read the full report from ACEEE, click here.

#### PROGRAM PERFORMANCE

	2015	2016
	2015	2016
Program spending	\$8.8 million	\$8.8 million
Number of grantees	56	53
Annual electric energy savings (MWh net)*	4,033	7,389
Annual peak demand savings (MW)	1.2	1.4
Annual gas energy savings (therms net)	191,587	174,859
Lifetime electric energy savings (MWh net)**	40,330	73,894
Lifetime gas energy savings (MM therms net)**	1.916	1.749
Cost-effectiveness results: Simple Payback (years), combined gas and electric	10.5	6.1

Most recent program evaluation

www.newportpartnersllc.com/PDFs/Low-to-Moderate-Income-Grant-Program-EMV-Results 2 9 18 FINAL.pdf

<sup>\*</sup> Program electric energy savings based on program calculators. Starting in FY2017 these data are determined based on an adjusted calculator from a 2017 EM&V evaluation. \*\*Estimated lifetime of the project is 10 years. The savings are multiplied by 10 years without any utility escalation.